ELECTRICAL DESIGN RULE CHECKING EXPERT TRAVERSER SYSTEM

ABSTRACT

Method and apparatus for rule checking systems that validate an electronic design is disclosed. Generally, information is extracted from a plurality of nodes in a netlist and stored for a set of predefined rules to share in a rule checking engine. The rule checking engine includes a generic routine for executing rules having a simple format. A user or developer may enter new rules in the form of one or more simple conditions that can be matched against any node in an electronic design under consideration. In one embodiment, the rule checking engine considers each node of the design in succession. At any given node, the engine applies all appropriate rules and flags any violation. I n some embodiments, rules may require consideration of properties from one or more neighboring nodes. Thus, in some embodiments, the rule checking engine can traverse multiple nodes in order to evaluate a rule.